Although not shown in FIG. 1, it will be understood that a plurality of function keys may also be provided on the unit 10 to represent a function of a combination of one or more keys, characters or commands. For example, the function keys described and shown with the keyboard 110 may also be utilized in conjunction with the unit 10. The refreshing means, whiled described in connection with the embodiment illustrated in FIG. 8, may also be utilized in connection with the unit 10. For example, refreshing means, may for example comprise a sensor 96, a user actuated switch 97, or both provided on the unit 10, as shown in FIG. 1. While the pins are illustrated within the apertures of the block, it will be understood that a safety bar may be mounted on the housing for the protection of the pins. Although the keys may be actuated by being depressed, other means of actuation may be employed, including, for example, motion sensory detection, with a sensor, voice recognition with voice sensory recognition apparatus, or other suitable actuation device.

What is claimed is:

- 1. A refreshable display unit comprising,
- a plurality of refreshable cells housed in the housing, each cell comprising:
 - (i) a guide block having six holes, (ii) six DC motors (pager type), preferably with all the motors oriented in the same direction, (iii) each motor having a coupler which may be rotated by the motor, (iv) a pin fastened to each coupler and extending into engagement with one of the holes of the guide block, and (v) a stop bar mounted on each coupler for engaging stop pins mounted on the housing for limiting the rotation of the coupler, (vi) the placement of the stop pins on the housing being such that it controls the with respect to the guide block,
- a safety bar mounted on the housing for protecting the pins, and
- means for connecting the display unit to the electronic means of a computer.
- 2. The unit of claim 1, further comprising a mechanism for displaying Braille characters in said cells.
 - 3. A refreshable computer display unit comprising:
 - a) a housing;
 - b) a plurality of refreshable cells carried on said housing; 45
 - c) wherein each cell comprises a guide block having an upper surface and at least six apertures therein, a like number of motors corresponding to the number of apertures, a coupler provided on each motor to be rotated by said motor, a pin connected to each coupler 50 and adapted to extend through one of the apertures, and stop means for limiting the rotation of each coupler to control the position of the pin extension relative to the guide block and regulate the pin position from a first position where the pin is positioned to extend above the 55 guide block surface and a second position where the pin is lowered to a position below the guide block surface.
- 4. The unit of claim 3, wherein said stop means comprises a wall provided proximate to said motor.
- 5. The unit of claim 4, wherein said coupler is configured 60 to be rotated by said motor through a predetermined path of rotation defined by a first position wherein said coupler engages a wall at a first location to limit further rotation of said coupler in a first direction, and a second position wherein said coupler engages a wall at a second location to 65 limit further rotation of said coupler in a direction opposite of the first direction.

- 6. The unit of claim 5, wherein said pin is positioned above the guide block surface when said coupler is in said first position, and wherein said pin is positioned below the guide block surface when said coupler is in said second position.
- 7. The unit of claim 6, wherein each motor is associated with a computer, said computer being controlled by software for regulating the position of each corresponding pin of a cell independently with respect to any other pin of the cell.
- 8. The unit of claim 5, wherein each motor is independently controllable from any other motor.
- 9. The unit of claim 3, wherein said coupler defines a rotational path, and wherein said stop means comprises at least one stop element disposed along the rotational path of the coupler, and a leg disposed on the coupler for selective engagement with said stop element.
- 10. The unit of claim 9, wherein said leg is disposed axially from said coupler, and wherein said stop means comprises a first stop element and a second stop element, 20 each being disposed at a predetermined location along the rotational path of said coupler.
 - 11. The unit of claim 10, wherein each cell comprises a guide block having at least six apertures therein.
 - 12. The unit of claim 3, wherein said stop means limits the depression of said pin against a force of the type generally applied by a user.
 - 13. The unit of claim 3, further comprising means for connecting the display unit to the electronic means of a computer, and means for sensing the input of a keystroke.
 - 14. The unit of claim 3, further comprising refreshing means for actuating the refreshing of the display unit.
 - 15. The unit of claim 14, where the refreshing means comprises a user actuated switch.
- 16. The unit of claim 14, wherein said cells are arranged height extension of the pin fastened to the coupler

 35 in a bank having a first end and a second end, and wherein the refreshing means comprises a sensor disposed to sense the position of the user's finger at at least one of the first bank end and second bank end.
 - 17. The unit of claim 3, further comprising:
 - a computer for processing information,
 - means for transmitting an input in the form of an electrical signal from a keyboard to the computer to detect a striking of one or more keys of the keyboard,
 - software for controlling the computer to read the input associated with the striking of one or more keys, wherein said processor compares a plurality of input signals associated with a plurality of key strikes with stored data to determine whether the keyboard is being used in a first orientation or a second orientation.
 - 18. The unit of claim 3, further comprising:
 - a keyboard for inputting Braille characters.
 - 19. The unit of claim 18,
 - the keyboard having a first set of a plurality of keys and a second set of a plurality of keys, wherein the first set of plurality of keys is arranged in a first predetermined location on the keyboard, and wherein the second set of plurality of keys is arranged in a second predetermined location on the keyboard, wherein the keyboard has a first orientation and a second orientation, wherein said first orientation presents the first set of plurality of keys proximate one side of the keyboard for use when the keyboard is in said first orientation, and wherein said second orientation presents the second set of plurality of keys proximate one side of the keyboard for use when the keyboard is in said second orientation, the keyboard further comprising a display for displaying a